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Job No.: CTCE/BBMP/W.No.17/MK/SDBC/Shape_T/2014-15 : 03.05.2014

DETERMINATION OF FLAKINESS INDEX & ELONGATION INDEX OF COARSE AGGREGATES

Client	: **Asst. Executive Engineer,** Yeshwanthapura Sub Division, BBMP, Bangalore.
Agency	: **Mr. M. Krishnamurthy,** Contractor, Bangalore.
Name of Work	: Providing and laying HDPE Water line in Ganesha Temple Block - II in J P Park, Ward No.17, BBMP, Bangalore.
Reference	: EE/RRND/Wo.No/223/2013-14 Dated: 05.02.2014
Technical Reference	: IS 2386(Part 1) 1963 (RA 2007)
Type of Mix	: Semi Dense Bituminous Concrete
Date of Testing	: 03.05.2014

Result : Flakiness Index = **11.55%**

Elongation Index = **13.65%**

Result : Combined Flakiness & Elongation index **25.20%**

Comments:

Maximum allowable Flakiness & Elongation Index for Semi Dense Bituminous Concrete is 30%

Note:

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Job No.: CTCE/BBMP/W.No.17/MK/SDBC/Stripping/2014-15

05.05.2014

Stripping Value of Road Aggregates (Static Immersion Test)

IS: 6241

Client	**Asst. Executive Engineer,** Yeshwanthapura Sub Division, BBMP, Bangalore.
Agency	**Mr. M. Krishnamurthy,** Contractor, Bangalore.
Name of the work	Providing and laying HDPE Water line in Ganesha Temple Block - II in J P Park, Ward No.17, BBMP, Bangalore.
Reference	EE/RRND/Wo.No/223/2013-14 Dated: 05.02.2014
Type of Mix	Semi Dense Bituminous Concrete
Date of Testing	05.05.2014

Type of binder : 60/70

Percentage of binder used : 5.0% by wt.

Total weight of aggregate : 200 g

Total weight of binder : 10.0 g

Temperature of water-bath : 40° C

Observation Number	Stripping, Percentage	Average, Percentage	Average Retained Coating, %
1	3.3	3.40	96.60
2	3.4		
3	3.5		

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Comments:

→ Minimum allowable Aggregate retained coating for Semi Dense Bituminous Concrete is 95%

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Job No.: CTCE/BBMP/W.No.17/MK/SDBC/Sp_Wa/2014-15

05.05.2014

Specific Gravity And Water Absorption Test

IS: 2386 Part III

Client	**Asst. Executive Engineer,** Yeshwanthapura Sub Division, BBMP, Bangalore.
Agency	**Mr. M. Krishnamurthy,** Contractor, Bangalore.
Name of the Work	Providing and laying HDPE Water line in Ganesha Temple Block - II in J P Park, Ward No.17, BBMP, Bangalore.
Reference	EE/RRND/Wo.No/223/2013-14 Dated: 05.02.2014
Type of Mix	Semi Dense Bituminous Concrete
Source / Location	Hotmix Plant, Bangalore
Date of Testing	05.05.2014

Sl. No.	Details	Notation	Test Number			Mean Value
			Test 1	Test 2	Test 3	
1	Weight of aggregate suspended in water with the basket	W_1 g	2020	2021	2022	
2	Weight of basket suspended in water	W_2 g	755	2020	755	
3	Weight of saturated aggregate in water	$(W_1 - W_2) = W_s$ g	1265	1266	1267	
4	Weight of saturated surface dry aggregate in air	W_3 g	2018	2019	2020	
5	Weight of water equal to the volume of the aggregate	$(W_3 - W_S)$ g	753	753	753	
6	Weight of oven dried aggregate	W_4 g	2012	2006	2000	
7	Specific Gravity	$W_4/(W_3-W_S)$	2.672	2.664	2.656	2.664
8	Apparent Specific gravity	$W_4/(W_4-W_S)$	2.693	2.711	2.729	2.711
9	Water Absorption	$((W_3-W_4)*100)/W_4$	0.30%	0.65%	1.00%	0.65%

Comments:

→ Maximum allowable Aggregate Water absorption value for Semi Dense Bituminous Concrete is 2.0%

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Job No.: CTCE/BBMP/W.No.17/MK/SDBC/Bit/2014-15 05.05.2014

BITUMEN CONTENT DETERMINATION OF SEMI DENSE BITUMINOUS CONCRETE MIX

AS per IRC:SP:-11-1984

CLIENT	**Asst. Executive Engineer,** Yeshwanthapura Sub Division, BBMP, Bangalore.
AGENCY	**Mr. M. Krishnamurthy,** Contractor, Bangalore.
NAME OF THE WORK	Providing and laying HDPE Water line in Ganesha Temple Block - II in J P Park, Ward No.17, BBMP, Bangalore.
REFERENCE	EE/RRND/Wo.No/223/2013-14 Dated: 05.02.2014
SAMPLE I/D	HDPE Water line in Ganesha Temple Block - II in J P Park, Ward No.17.
DATE OF TESTING	05.05.2014

BITUMEN CONTENT DETERMINATION

Description	Trail 1	Trail 2
1. Weight of Mixture before Test, g	500	500
2. Weight of Mixture after Test, g	475	474
3. Weight of Asphalt and Mineral matter Extracted, g	-	-
4. Weight of Mineral Matter, g.	-	-
5. Weight of Ash, g		
6. Weight of Bitumen Extracted, g. (corrected)	25	26.00
7. Bitumen content in %	5.00	5.20
8. Average	**5.10**	

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